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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,844	03/26/2007	Peter Bauer	2004P00501WOUS	4430

46726 7590 04/19/2011  
BSH HOME APPLIANCES CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
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NEW BERN, NC 28562

EXAMINER
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BAUER, CASSEY D

ART UNIT	PAPER NUMBER
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3784

NOTIFICATION DATE	DELIVERY MODE
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04/19/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

## Office Action Summary

Application No.

10/593,844

Applicant(s)

BAUER ET AL.

Examiner

Cassey Bauer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No.(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No.(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The Amendment filed February 11, 2011 has been entered. Claims 16-36 remain pending in the current Application.

#### ***Claim Rejections - 35 USC § 112***

**Claims 16-32** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 16, line 7, Applicant utilizes means plus function language, i.e. “means for switching the mode of operation”. The language meets the three-prong analysis for 35 USC 112 sixth paragraph. Therefore, it is assumed that Applicant is invoking 35 USC 112 sixth paragraph and the means for switching the mode of operation is limited to what is disclosed in the written description and equivalents thereof.

However, 35 USC 112 sixth paragraph specifically requires that if one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by second paragraph of section 112. Applicant does not explicitly state what corresponding structure or material acts will perform the recited function, nor does Applicant implicitly set forth such structure which would be clear to those

skilled in the art what structure or material acts correspond to the means-plus-function limitation. In the present case, the only structure of which Applicant disclosed which corresponds to the means for switching claimed are switches (16 and 17). However, in Applicant's paragraph [0026] of the disclosure the following language is present: ". . . regulators 14, 15 or, *if provided*, selector switches 16, 17. . .". Further, in Applicant's paragraph [0025] the Applicant suggests that the selector switches are not present in the first variant described, ". . . impossible in the variant first described, *without a selector switch*." The "if provided" language of [0026] and the first variant which does not include a selector switch, would suggest that the selector switches 16, and 17 need not be provided with the invention and would therefore not be considered the claimed means for switching since the switching would have to occur by some other structure when the switches are not provided. Further, the regulators (14, 15) cannot be considered structure which would perform the recited functions since the regulators are not provided with each disclosed embodiment, see specifically the embodiment of figure 5. This would suggest to one skilled in the art that the regulators are optional and not the means for switching since some other structure would have to perform the switching function when the regulators are not present as in the embodiment illustrated in figure 5. For at least these reasons Applicant's disclosure does not *clearly* set forth any structure or material acts which perform the claimed function in a way that one skilled in the art would understand as required by. Therefore, it is unclear what structure or material acts or equivalents

thereof are being claimed and the claims do not meet the MPEP 2181 I requirement for providing an adequate disclosure showing what is meant by that language. Furthermore, since the description is inadequate, the claims do not meet the requirements of 35 USC 112 second paragraph for particularly pointing out and distinctly claiming the subject matter which applicant regards as the invention.

Since Applicant has failed to properly provide disclosure for the claimed means for switching, the examiner is going to treat the claim under the broadest reasonable interpretation.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 16-18, 25, 28, and 31-33 and 35** are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,477,915 to Park, hereinafter referred to as Park

In reference to claim 16, Park discloses the claimed invention including:

A refrigerating appliance, see figures 1 and 2, comprising:

at least two storage compartments (1, 2) thermally insulated from each other and from a surrounding area, see figure 2;

an evaporator (54), which can be cooled independently from an evaporator (60) of at least one other storage compartment, being associated-provided with each storage compartment; and

means for switching the mode of operation of at least one of the compartments between a freezing mode and a non-freezing mode (20, 30, 40, 35A, 45A) see column 2 lines 19-27 .

In reference to claim 17, Park discloses the claimed invention including:

wherein the means for switching the mode of operation also allow switching to a 0 °C mode, see column 2 lines 19-27 “freezing”.

In reference to claim 18, Park discloses the claimed invention including:

wherein the means for switching the mode of operation are provided for the at least two compartments, (20, 30, 35A for compartment 1 and 20, 40, 45A for compartment 2), see figure 1.

In reference to claim 25, Park discloses the claimed invention including:

wherein the first and second compartments have insulation of substantially the same thickness, see figure 2.

In reference to claim 28, Park discloses the claimed invention including:

wherein a compressor (70) is installed in a recess made in one of the compartments (2), see figure 2.

In reference to claim 31, Park discloses the claimed invention including:

wherein the means for switching the mode of operation of at least one of the compartments between a freezing mode and a non-freezing mode includes a regulator (30) and a selector switch (35A).

In reference to claim 32, Park discloses the claimed invention including:

further comprising a second regulator (40) and a second selector switch (45A), wherein each of the compartments is associated with one of the regulators and selector switches to control the mode of operation within the compartment (30 and 35A for compartment 1 and 40 and 45A for compartment 2).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 19-24 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park.

In reference to claims 19-24, Park discloses the claimed invention including:

Park fails to teach one or both of the evaporators being either a wire tube evaporator, a lateral wall evaporator, a no-frost evaporator, or a plate-type evaporator. However, the examiner takes official notice that it is well known in the art of refrigeration to provide an evaporator for a refrigerated compartment of a refrigerator designed as a wire tube evaporator, a lateral wall evaporator, a no-

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frost evaporator, or a plate-type evaporator. Since Applicant has not disclosed that having one or both of the evaporators being either a wire tube evaporator, a lateral wall evaporator, a no-frost evaporator, or a plate-type evaporator does anything more than provide predictable results and it appears that the refrigerator of Park would work equally well if the evaporators (54 and 60) were of any particular design as long as it provided a cooling effect and fit within the confines of the refrigerator case, it would have been a mere matter of obvious design choice to one having ordinary skill in the art at the time the invention was made, to modify the apparatus of Park so that one or more of the evaporators were either a wire tube evaporator, a lateral wall evaporator, a no-frost evaporator, or a plate-type evaporator and meet the claimed limitations of claims 19-24 in order to provide predictable results.

In reference to claim 27, Park discloses the claimed invention including:

Park teaches at least one of the compartments (2) cannot be switched to a freezing mode, but fails to teach the compartment having a thinner insulation than the other of the compartments which can be switched to the freezing mode. However, the examiner takes official notice that it is well known in the art to provide a refrigeration compartment which does not have freezing capabilities with thinner insulation than a compartment which does have freezing capabilities. Since one skilled in the art would understand that the conductive heat transfer between the interior of the refrigerator and the exterior is dependent upon the temperature difference between the interior and exterior, one skilled in the art



would understand that a compartment which is maintained a temperature nearer the external environment would not have as high of a conductive heat transfer rate and would therefore require less insulation than a compartment maintained as a much lower temperature. Further, one skilled in the art would understand that providing thinner insulation would advantageously reduce the cost of insulation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the apparatus of Park to include the non-freezing compartment having a thinner insulation than the other of the compartments which can be switched to the freezing mode in order to advantageously provide for cheaper insulation costs.

**Claims 26 is** rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of US 5,377,498 to Cur et al., hereinafter referred to a Cur.

In reference to claim 26, Park and Cur disclose the claimed invention including:

Park teaches the first (1) and second compartments (2) have different volumes but fails to teach the compartments being operated in the same plurality of operating modes.

However, Cur teaches that it is a known method to provide a refrigerating apparatus with independently cooled storage compartments with a plurality of operating modes (-18C, 0C, 5C, see column 1 lines 44-68) and each compartment can be operating in the same plurality of operating modes. Further,

one skilled in the art would understand that by providing both of the compartments of Park with the ability to switch between a refrigerating mode, a freezing mode and/or a heating mode, would advantageously increase the flexibility of the refrigerating apparatus. Since all claimed elements all claimed elements were known in the art and one having ordinary skill in the art could have combined the elements as claimed by known methods with no change in their respective functions and the combination would have yielded the predictable result of allowing each compartment of the refrigerator to be operable in a refrigerating, freezing and/or heating mode, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the apparatus of Park so that the compartments were operated in the same plurality of operating modes in order to advantageously increase the operability and flexibility of the refrigerator.

**Claims 29 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of US 3,712,078 to Maynard et al., hereinafter referred to as Maynard.

In reference to claim 29, Park and Maynard disclose the claimed invention including:

Park fails to teach the compressor is installed in a socket unit.

However, Maynard teaches that it is a known method to provide a compressor unit (18) installed in a socket unit (10) of a refrigerator, see figure 1. Maynard further teaches that providing a compressor unit in a socket unit has a very substantial advantage from a manufacturing and servicing point of view, see

column 1 lines 41-56. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the apparatus of Park to include the compressor installed in a socket unit as taught by Maynard in order to advantageously reduce manufacturing and service costs as taught by Maynard column 1 lines 41-56.

In reference to claim 30, Park and Maynard disclose the claimed invention including:

Park and Maynard disclose wherein the at least two compartments (1 and 2 of Park) are formed in a body which *can be* connected to the socket unit in at least one of a first orientation and a second orientation rotated 180° about a horizontal axis relative to the first orientation. The claim language of claim 30 merely requires that the body of Park can be connected to the socket unit of Maynard in a first and second orientation. Therefore, the cabinet of Park needs only to be capable of being connected to the socket unit of Maynard in a first and second orientation. Since the body of Park is perfectly capable of being connected to the socket of Maynard a first orientation and a second orientation rotated 180° about a horizontal axis relative to the first orientation, the combination of Park and Maynard meets the claimed limitations.

**Claims 33, 35 and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of US 2003/0000241 to Holz et al., hereinafter referred to as Holz.

In reference to claims 33 and 36, Park and Holtz disclose the claimed invention including:

A refrigerating appliance, see figures 1 and 2, comprising:  
at least two storage compartment (1, 2) thermally insulated from each other and from a surrounding area, see figure 1;  
an evaporator (54), which can be cooled independently from an evaporator (2) of at least one other storage compartment, being provided with each storage compartment, wherein each of the storage compartments is operable in a plurality of operating modes of different temperatures, see abstract; and  
a mode switch (35A) cooperable with the evaporator (54) and acting to switch the mode of operation of the compartments between the operating modes.

Park fails to teach the evaporators (54 and 60) being connected in parallel to effect the independent cooling.

However, Holz teaches that it is a known method to provide the evaporators of a freezer compartment (13) and the evaporators of the refrigerating compartment (17) arranged in parallel to effect independent cooling of each compartment [0002]. Since all claimed elements were known in the art and one having ordinary skill in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded the predictable result of separate temperature regulation of the compartments, it would have been obvious to one having ordinary skill in the art at the time the invention was made, to modify the

apparatus of Park, so that the evaporator (60) and (54) were connected in parallel, in order to provide predictable results.

In reference to claim 35, Park and Holtz disclose the claimed invention including:

wherein the plurality of operating modes for each of the storage compartments are different, see column 2 lines 19-27.

**Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over Park, Holtz, and Cur.

In reference to claim 34, Park Holtz and Cur disclose the claimed invention:

The subject matter of claim 34 is substantially the same as the subject matter of claim 26 and has been addressed in the rejection of claim 26 above. See rejection of claim 26 above.

### ***Response to Arguments***

Applicant's arguments with respect to the rejection under 35 USC 112 second beginning on page 8 of the response that one skilled in the art would see that setting of the theoretical temperate effects switching and there fore one skilled in the art would understand that the regulators are necessary for switching has been considered but is not persuasive. As described in Applicant's specification regulators or selector switches are not necessarily associated with each disclosed embodiment therefore it is not clear if both the switch and regulator, or either the switch or the regulator is the structure to be associated with the claimed means for switching. Further, assuming, *arguendo*, that there is sufficient disclosure that the regulator is the claimed means for switching, what

specific structure is implied by a generically described "regulator"? Is it a switch? A valve? A thermostat? A controller? All of these structures can "enable a user to set a theoretical temperature for two separate compartments of a refrigerator" yet the disclosure does not let one skilled in the art know which specific structure is implied by a regulator. Therefore, even if the described regulator is indeed clearly associated with the means for switching, one skilled in the art would still not know what specific structure is associated with said regulator and the claims are thus unclear. For at least the reasons stated above, the rejection of the claims under 35 USC 112 second paragraph is proper and remains.

Applicant's arguments beginning on page 10 of the response that the evaporators (50, 60) are not cooled independently from an evaporator of the at least one other storage compartment as required by claim 1 has been considered but is not persuasive. Firstly, Applicant argues that (54) is not an evaporator but (50) is. The examiner disagrees. Since refrigerant is evaporated in both section (52) and (54) each section can indeed be independently defined as an individual evaporator. There is nothing in the claim language which would suggest that it is not appropriate for the examiner to define section (54) and only section (54) as one of the evaporators required by claim 1. Since the refrigerant exiting section (52) does not have to flow through section (54) the examiner believes that it is reasonable to interpret section (52) and section (54) as two separate evaporators arranged in series. When section (54) and only section (54) is defined as one of the claimed evaporators, evaporator (54) and evaporator (60) *can* indeed

function independently from each other. Consider the following mode of operation: in valve (35A) P01 is closed and in valve (45A) P01 is open. In this mode of operation, evaporator (60) is cooled independently of evaporator (54). Consider the following mode of operation: in valve (35A) P01 is open and in valve (45A) P01 is closed. In this mode of operation, evaporator (54) is cooled independently of evaporator (60). Therefore, the evaporators can be cooled independently from each other and meets the claimed limitations. Therefore, the examiner asserts that the rejection of claim 16 is proper and remains.

With regard to dependent claims 17, 18, 25, 28, 31, and 32, the claims are dependent upon properly rejected claim 16 and do not cite features which define over the prior art of record and are therefore proper and remain.

Applicant's arguments with respect to claim 33 beginning on page 11 of the response are similar to those arguments with respect to claim 16 and have been addressed above. Further Applicant argues that the amendments to claim 33 further defines over the prior art of record. The amended claim feature of the evaporators to be connected in parallel has been addressed with the inclusion of the reference to Holz et al.

With regard to dependent claim 35, the claim is dependent upon properly rejected claim 33 and does not cite features which define over the prior art of record and are therefore proper and remain.

With regard to claims 19-24 and 27, the examiner asserts that claim 16 is properly rejected and since claims 19-24 and 27 do not cite features which define over the prior art of record, the rejections are proper and remain.

With regard to claims 26 and 34, the examiner asserts that claims 16 and 33 are properly rejected and since claims 26 and 34 do not cite features which define over the prior art of record, the rejections are proper and remain.

With regard to claims 29 and 30, the examiner asserts that claim 16 is properly rejected and since claims 29 and 30 do not cite features which define over the prior art of record, the rejections are proper and remain.

With regard to new claim 36, the examiner asserts that the specifics of claim 36 are made obvious due to the teachings of Holtz and is therefore proper and remains.

### ***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassey Bauer whose telephone number is (571)270-7113. The examiner can normally be reached on Monday -Thursday: 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on (571)272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frantz F. Jules/  
Supervisory Patent Examiner, Art Unit 3744

/Cassey Bauer/  
Examiner, Art Unit 3784

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